Chapter 4: Pandemic Influenza

Canada, Mexico, and the United States recognize that controlling the spread of a novel strain of human influenza with minimal economic disruption is in the mutual best interest of all three countries. This chapter, therefore, assumes that a focus on preventing or delaying the spread of a novel strain of human influenza or mitigating the impacts of pandemic influenza must serve public health, social and economic goals. Likewise, this chapter and any resulting measures that may ensue are to be based on sound science and recognize that decision making on public health questions also needs to reflect cultural, ethical, legal, economic, logistical and political considerations.

Recognizing the mutual benefits of a coordinated response to an outbreak of pandemic influenza, the three countries intend to assist one another in domestic and international pandemic influenza preparedness efforts. They intend also to work together to implement appropriate public health measures at the shared borders. Health officials from the three countries intend to meet regularly to:

- Identify new areas and build on existing areas of collaboration:
- Identify challenges to the implementation of the North American Plan;
- Identify areas where the three countries need additional assistance; and
- Identify opportunities to exercise pandemic influenza preparedness and response planning.

Surveillance, Epidemiology And Laboratory Practices

Objectives for strengthening surveillance, epidemiology and laboratory practices among the three countries include the following:

- Enhancing epidemiological, surveillance and laboratory capabilities;
- Improving rapid detection of infection with influenza strains that have pandemic potential;

- Promoting collaboration on the epidemiological and laboratory assessment of infection with influenza strains that have pandemic potential; and
- Enhancing timely communication on surveillance, epidemiological and laboratory data.

Surveillance and Epidemiology

Canada, Mexico and the United States intend to share non-nominal epidemiological and surveillance data and information as appropriate. To this end, the three countries intend to:

- Develop operating procedures/processes for the sharing of human influenza epidemiological and surveillance information before and during an emergency, including:
 - Examining information technologies to identify opportunities that would enhance rapid data transfer, and
 - * Sharing surveillance protocols and data interpretations;
- Establish and test mechanisms for communication among institutions according to specific functions for exchanging epidemiological information;
- Align with the WHO case definitions;
- Share regular situation reports with essential epidemiological data, in the event of a pandemic;
- Identify areas of technical assistance needed for laboratory, surveillance and outbreak response;
- Provide technical assistance through cross-border projects to bolster surveillance efforts for seasonal and pandemic influenza; and
- Establish approaches to collaborating on North American outbreak investigations, and collaborate on investigations and response efforts, as feasible and appropriate.

Laboratory Practices

The cross-border transport of specimens and isolates by federal, provincial and state laboratories in the three countries before and during a pandemic can facilitate diagnosis and contribute to the development and/or evaluation of reagents, tests, vaccines and antiviral drugs. The three countries should review and improve procedures to permit these materials to cross their borders without delay or payment of customs duties or fees. The three countries should continue to develop and exercise mechanisms for border security officials to facilitate the rapid exchange of laboratory samples, reagents, supplies and specimens. They should also improve chain-ofcustody protocols for the proper and safe handling of the sample and reagents. The three countries should share existing procedures so that adequate supplies of diagnostic materials/reagents are available in the event of a pandemic influenza outbreak.

Building on the existing capacity, Canada, Mexico and the United States intend to collaborate on the following activities:

- Continue technical review and the sharing of assay methods, reagents and virologic data related to human cases of influenza; and
- Strengthen operating procedures/processes for the sharing of laboratory information before and during an emergency, including:
 - * Examining information technologies to identify opportunities that would enhance rapid data transfer;
 - * Sharing data, data analyses, and data interpretations;
 - * Enhancing laboratory-to-laboratory communication; and
 - * Assessing the need for and providing additional training in laboratory diagnostics.

Pandemic Influenza Vaccines And Antivirals

Objectives related to pandemic influenza vaccines and antivirals include:

- Establishing information exchange on pandemic influenza vaccine and antiviral research; and
- Identifying regulatory issues that affect the assessment and approval of a pandemic vaccine and antiviral drugs.

Research and Development

Each SPP country recognizes the need for improving the capacity to produce pandemic influenza vaccines. As such, experts from the three countries should share their strategies for securing supply, including building domestic vaccine production capacity. In addition, these experts should also establish linkages and share information on research and development related to human influenza vaccines. To the extent possible, the three countries intend to use existing international fora for these discussions.

To the extent possible, the three countries should do the following:

- Support basic and applied research on influenza vaccines and antivirals;
- Communicate future research needs and areas of interest specific to seasonal and pandemic influenza;
- Provide the scientific community with access to information including genome sequence information;
- Share information with the research community through presentations, scientific publications, and discussions at international scientific meetings and workshops; and
- Share information, as appropriate, regarding clinical trials of vaccines and therapeutics for influenza.

Regulatory Issues

To the extent possible, the three countries intend to work to develop compatible regulatory approaches for developing and approving pandemic influenza vaccines, through existing international efforts.

Personnel And Materials

The extent to which the three countries would be able to share personnel and materials across borders during a pandemic depends on unknown factors, such as the severity, phase and duration of a pandemic. The three countries intend to work domestically with appropriate jurisdictions as well as together to facilitate the rapid exchange of epidemiological, laboratory and medical personnel during a pandemic. In the case of medical personnel exchange, licensure issues should be addressed.

SPP objectives related to the sharing of personnel and materials in a public health emergency include the following:

- Facilitating the ability to provide personnel assistance in a pandemic;
- Establishing public health liaisons; and
- Enhancing information sharing on stockpile planning.

Mutual Assistance

In accordance with SPP deliverables and throughout the North American Plan, Canada, Mexico and the United States intend to plan for and provide personnel and material assistance, to the extent possible. The countries intend to continue to:

- Identify the roles of federal, state/province and local governments during a public health emergency;
- Identify legal and regulatory challenges to the exchange of medical personnel, countermeasures and supplies in the event of a public health emergency; and
- Identify possible federal solutions to allow the three countries to more effectively and efficiently assist one another during a public health emergency, where state, provincial and local jurisdiction is limited.

Personnel Exchange

It is possible that a state or province will request additional health care personnel through its national government to respond to an emergency. Because each state or province in the United States and Canada, respectively, controls the licensure of health professionals, the national government should encourage its states or provinces to develop procedures for the exchange of licensed personnel that may include the temporary, rapid recognition of existing licenses or certificates. In the case of the Mexican states, the Federal Labor Law governs licensure. Thus, movement of personnel among and within the Mexican states and municipalities requires no additional procedures. Issues such as liability, indemnification and proper documentation necessary to work in the other countries should be addressed through relevant national, state or provincial authorities.

Canada, Mexico and the United States intend to establish protocols for the exchange of appropriate public health liaison officers. Each country, at the request of one of the other countries, should deploy a liaison officer to the public health department/agency of that country on an ongoing basis. The public health liaison officer should act as a liaison for the other national public health department/agency, facilitate communications among emergency operations centers (EOCs) and be a point of contact for the officer's particular national public health agency. The countries intend that the public health liaison officer do the following:

- Facilitate the exchange of comprehensive descriptions of response systems within their federal governments, including key functions and updated lists of key contact personnel for each country's public health emergency management teams; and
- Share information, including surveillance and epidemiology data, and standard operating procedures for the response to pandemic influenza.

Stockpiles

While the three countries may have different goals for their respective pandemic influenza medical stockpiles, they should work together to do the following:

- Share information on their strategies to stockpile materials related to pandemic influenza, in particular:
 - * Share their publicly available stockpiling goals for pandemic influenza countermeasures and other pandemic influenza medical materials, and

- * Where possible, share their planning and/or modeling assumptions used when determining the contents of their pandemic influenza medical stockpiles;
- Cooperate with one another in the development of their stockpiles of material related to pandemic influenza:
 - Identify areas in which they need technical assistance in the development of national stockpiles, and
 - * Meet annually to identify areas in which they need additional cooperation;
 - Share shelf-life extension strategies;
 - Share strategies on the mass distribution of stockpile material:
 - * Share their methods for distributing stockpile material, and
 - * Identify distribution challenges and alternative distribution strategies; and
 - Share best practices on the current use of, and issues related to, stockpiles:
 - * Share allocation strategies for the use of a pandemic influenza vaccine and antivirals, as developed and updated, and
 - * Share antiviral strategies for containing an initial focus of novel influenza virus of pandemic potential, as developed and updated.

Public Health Measures

Canada, Mexico and the United States will attempt to contain a novel strain of human influenza at its source, slow its spread to and reduce its impact in North America. These efforts should allow the appropriate movement of people and cargo across mutual land borders and ports of entry in a way to achieve the public health objective with minimal social and economic impact. Each country should gauge the severity of the influenza pandemic and implement public health measures and/or community-based interventions accordingly.

In the absence of scientific efficacy data for many of the potential public health measures, this Plan is intended to help facilitate a coordinated approach to community disease control. This should reduce the need to explain and justify divergent approaches at the time of a pandemic and may also optimize public confidence at a time of much uncertainty. Many of the recommendations are contingent upon local triggers; therefore, the timing of their implementation would not necessarily be simultaneous across the countries. Ideally, however, the types of measures and public health messages should be consistent. In general, the three countries concur that when persons infected with a novel virus first appear, aggressive measures may be valuable in slowing its spread, attenuating the impact or possibly containing an evolving pandemic. Once the virus is widespread in North America, mitigation measures may be modified based on considerations with respect to any benefit they may have.

The three countries recognize that issues of feasibility, logistics, impact, acceptability and compliance in implementing public health measures are shaped by the context in which they would be implemented.

To the extent possible, and in the context of local epidemiology, the countries intend to use the WHO phases as "triggers" to inform implementation of public health measures. The countries intend to share information on their planned approaches to public health measures such as the following:

- Public education (e.g. on hand washing, staying home from work, workplace infection control);
- The use of antivirals and vaccines;
- The use of personal protective equipment (e.g. masks and personal respirators);
- Social distancing measures, including school closures and the prohibition of community gatherings;
- Travel and border public health measures; and
- Isolation and quarantine.

Travel and border public health measures should be compatible with the revised IHRs (2005), should be tailored to the status of pandemic disease within North America and the level of public health risk associated with cross-border movement, and should recognize the mutual benefits of ongoing trade and economic activity.